

IN THE CLAIMS:

Please amend claims 35, 40-45, and 47-54 and cancel claim 39, without prejudice or disclaimer, as follows.

1-27. Cancelled.

28. (Previously Presented) A method for providing location privacy for a terminal node in communication with a communication partner node in a communication network system comprising at least a first communication network, wherein a respective node communicating via said communication network system is identified by its permanent network address and is addressable by a temporary network address, at least one server entity, a plurality of agent entities, wherein each of said at least one server entities maintains a record of said plurality of agent entities and their respective location within the network system,

said method comprising the steps of:

requesting, by said terminal node, said at least one server entity for location privacy;

selecting, at said at least one server entity, a specific one of said plurality of agent entities, based on data maintained in said record of said server entity and said temporary network address of said requesting terminal node; and

communicating messages between said terminal node and said communication partner node via said selected one of said agent entities.

29. (Previously Presented) A method according to claim 28, wherein:

said request includes the network address of said communication partner node with which a communication is desired to be performed, the permanent network address of said requesting terminal node, and said temporary network address of said requesting terminal node by which it is addressable within said communication network system.

30. (Previously Presented) A method according to claim 28, wherein:
said respective location of said agent entities is derivable based on a network domain to which the agent entity is assigned, the domain being represented by a network address range in the network.

31. (Previously Presented) A method according to claim 30, wherein:
said selecting is based on said known network address of said communication partner node with which a communication is desired to be performed, which is included in said request.

32. (Previously Presented) A method according to claim 31, wherein said selecting comprises the steps of:
first retrieving a first network domain represented by a network address range to which address range the temporary address of the requesting terminal node belongs;
second retrieving a second network domain represented by a network address range to which address range the address of the communication partner node belongs;
and
determining the agent entity to be selected, based on said retrieved information.

33. (Previously Presented) A method according to claim 28, further comprising a step of:
informing said requesting terminal node about the selected agent entity before communicating messages.

34. (Previously Presented) A method according to claim 28, further comprising the steps of:
creating, by said terminal node at said selected agent entity, a mapping between

the terminal node's permanent network address and its temporary network address; and
creating, by said terminal node at said communication partner node, a mapping
between the terminal node's permanent network address and the selected agent entity's
address.

35. (Currently Amended) A communication network system, comprising:
at least a first communication network wherein a respective node communicating
via said communication network system is identified by its permanent network address
and addressable by a temporary network address;
at least one server entity; and
a plurality of agent entities; ~~and~~ wherein each of said at least one server entity
maintains a record of said plurality of agent entities and their location within the network
system;
a database means configured to maintain a record of a plurality of agent entities
and their respective location within a communication network system; and
a processing means configured to select a specific one of said plurality of agent
entities, based on data maintained in said record and a temporary network address of a
requesting terminal node.

36. (Previously Presented) A communication network system according to claim
35, wherein:
said respective location of said agent entities is derivable based on a network
domain to which the agent entity is assigned, the domain being represented by a network
address range in the network.

37. (Previously Presented) A communication network system according to claim
35, wherein:

to each of said communication networks there is associated one of said server entities.

38. (Previously Presented) A communication network system according to claim 35, wherein:

to each of said communication networks there is associated a plurality of said agent entities.

39. (Cancelled)

40. (Currently Amended) A communication network system ~~At least one server entity~~ according to claim ~~39~~35, wherein:

said respective location of said agent entities is derivable based on a network domain to which the agent entity is assigned, the domain being represented by a network address range in the network.

41. (Currently Amended) A communication network system ~~At least one server entity~~ according to claim 40, wherein said processing means comprises:

selection means which comprises first retrieving means adapted to retrieve a first network domain represented by a network address range to which address range the temporary address of the requesting terminal node belongs;

second retrieving means adapted to retrieve a second network domain represented by a network address range to which address range the address of the communication partner node belongs; and

determination means adapted to determine the agent entity to be selected, based on said retrieved information.

42. (Currently Amended) A communication network system ~~At least one server~~

~~entity~~ according to claim ~~39~~35, wherein:

said record is configured by a network operator dependent on a topology of a communication network forming a communication network system.

43. (Currently Amended) A communication network system ~~At least one server~~
~~entity~~ according to claim ~~39~~35, wherein:

said record is configured by a network operator dependent on a topology of a communication network forming a communication network system, and said server entity is adapted to extend said record by adding record information from other server entities within said communication network system.

44. (Currently Amended) A communication network system ~~At least one server~~
~~entity~~ according to claim ~~39~~35, further comprising:

transmission means adapted to receive and send information used for forming and maintaining said record, receive requests from terminal nodes; and to send processing results to a requesting terminal.

45. (Currently Amended) A communication network system ~~At least one server~~
~~entity~~ according to claim 44, wherein:

said transmission means is adapted to send processing results to a selected agent entity.

46. (Previously Presented) A communication network system according to claim 35, wherein each of said plurality of agent entities comprises

a memory means adapted to cache a mapping of a permanent address identifying a terminal node to a temporary address of said terminal node indicative of a location of said terminal node, and

routing means adapted to forward data packets received from said terminal node

to an addressed communication partner node and to forward data packets received from said communication partner to said terminal node, wherein said forwarding is based on the cached mapping information in said memory means.

47. (Currently Amended) ~~In a~~A communication network system, comprising:
at least a first communication network wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity;
a plurality of agent entities; and wherein
each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is adapted to carry out the method according to claim 28.

48. (Currently Amended) A communication network system ~~A server entity~~
according to claim 42, wherein:
said record is configured by a network operator dependent on a topology of a communication network forming a communication network system, and said server entity is adapted to extend said record by adding record information from other server entities within said communication network system.

49. (Currently Amended) ~~In a~~A communication network system, comprising:
at least a first communication network wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity;
a plurality of agent entities; and wherein
each of said at least one server entity maintains a record of said plurality of agent

entities and their location within the network system, wherein said terminal node is adapted to carry out the method according to claim 29.

50. (Currently Amended) ~~In a~~A communication network system, comprising:
at least a first communication network wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity;
a plurality of agent entities; and wherein
each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is adapted to carry out the method according to claim 30.

51. (Currently Amended) ~~In a~~A communication network system, comprising:
at least a first communication network wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity;
a plurality of agent entities; and wherein
each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is adapted to carry out the method according to claim 31.

52. (Currently Amended) ~~In a~~A communication network system, comprising:
at least a first communication network wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity;

a plurality of agent entities; and wherein
each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is adapted to carry out the method according to claim 32.

53. (Currently Amended) ~~In a~~A communication network system, comprising:
at least a first communication network wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity;
a plurality of agent entities; and wherein
each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is adapted to carry out the method according to claim 33.

54. (Currently Amended) ~~In a~~A communication network system, comprising:
at least a first communication network wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity;
a plurality of agent entities; and wherein
each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is adapted to carry out the method according to claim 34.